General

Title

Non-Hodgkin lymphoma: percent of lymphoma patients treated with anti-CD20 monoclonal antibody-containing regimens and tested for hepatitis B prior to medication administration.

Source(s)

American Society of Hematology (ASH). Non-Hodgkin lymphoma measure set: measure specifications. Washington (DC): American Society of Hematology (ASH); 2017 Feb. 36 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percent of lymphoma patients treated with anti-CD20 monoclonal antibody-containing regimens and tested for hepatitis B prior to medication administration.

Rationale

Support (verbatim) from The National Comprehensive Cancer Network (NCCN) guidelines:
Due to the risk of hepatitis B reactivation, the [NCCN] panel has included hepatitis B testing (hepatitis B surface antigen [HBsAg] and hepatitis B core antibody [HBcAb]) as part of essential work-up prior to initiation of treatment in all patients who will receive anti-CD20 monoclonal antibody-based regimens. Furthermore, hepatitis B reactivation has been reported with chemotherapy alone and testing should be considered in anyone with a risk factor (e.g., blood transfusion, intravenous [IV] drug abuse) or if from a region with a non-negligible prevalence of hepatitis B infection.

Hepatitis B virus (HBV) reactivation has been reported to occur in patients treated with chemotherapy

with or without immunotherapy agents. HBV carriers with lymphoid malignancies have a high risk of HBV reactivation and disease, especially those treated with anti-CD20 monoclonal antibodies (e.g., rituximab, ofatumumab). Cases of liver failure and death associated with HBV reactivation have occurred in patients receiving rituximab-containing regimens. The panel recommends HBsAg and HBcAb testing for all patients planned for treatment with anti-CD20 monoclonal antibody-containing regimens (NCCN, 2015).

Evidence for Rationale

American Society of Hematology (ASH). Non-Hodgkin lymphoma measure set: measure specifications. Washington (DC): American Society of Hematology (ASH); 2017 Feb. 36 p.

National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: non-Hodgkin's lymphoma. Version 12.2016. Fort Washington (PA): National Comprehensive Cancer Network (NCCN); 2015 Nov 24.

Primary Health Components

Non-Hodgkin lymphoma (NHL); anti-CD20 monoclonal antibody-containing regimens; hepatitis B testing; hepatitis B surface antigen (HBsAg) testing; hepatitis B core antibody (HBcAb) testing

Denominator Description

The number of lymphoma patients in your selection treated with anti-CD20 monoclonal antibody-containing regimens (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

The number of lymphoma patients in your selection:

Treated with anti-CD20 monoclonal antibody-containing regimens
AND

Tested for hepatitis B (hepatitis B surface antigen [HBsAg] AND hepatitis B core antibody [HBcAb]) in advance of starting treatment

See the related "Numerator Inclusions/Exclusions" field.

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Statement (verbatim) from American Society of Clinical Oncology (ASCO) on gap:
An ASCO provisional clinical opinion (PCO) offers timely clinical direction to ASCO's membership following

publication or presentation of potentially practice-changing information. This PCO addresses recommendations for chronic hepatitis B virus (HBV) infection screening in patients receiving cytotoxic or immunosuppressive chemotherapy for treatment of malignant diseases.

The Centers for Disease Control and Prevention (CDC) issued Recommendations for Identification and Public Health Management of Persons with Chronic Hepatitis B Virus Infection, recommending screening for hepatitis B infection (hepatitis B surface antigen [HBsAg], antihepatitis B core antigen [anti-HBc], and antibodies to HBsAg [anti-HBs]) for "persons receiving cytotoxic or immunosuppressive therapy (e.g., chemotherapy for malignant diseases…)."

The evidence is insufficient to determine the net benefits and harms of routine screening for chronic HBV infection in individuals with cancer who are about to receive cytotoxic or immunosuppressive therapy or who are already receiving therapy. Individuals with cancer who undergo certain cytotoxic or immunosuppressive therapies and have HBV infection or prior exposure to HBV may be at elevated risk of liver failure from HBV reactivation. As such, HBV screening requires clinical judgment. Physicians may consider screening patients belonging to groups at heightened risk for chronic HBV infection (such as those with lymphoproliferative diseases – qualification added by the American Society of Hematology [ASH] Lymphoma Task Force) or if highly immunosuppressive therapy is planned (such as corticosteroids, purine analogues, rituximab or wide field radiation – note added by ASH Lymphoma Task Force). Highly immunosuppressive treatments include, but are not limited to, hematopoietic cell transplantation and regimens including rituximab. Screening based on a high risk of prior HBV exposure or risk of reactivation due to planned therapeutic regimens should include testing for HBsAg as a serologic marker for HBV infection.

In some populations, testing for anti-HBc should also be considered. There is no evidence to support serologic testing for anti-HBs in this context. When evidence for chronic HBV infection is found, antiviral therapy before and throughout the course of chemotherapy may be considered to reduce the risk of HBV reactivation, although evidence from controlled trials of this approach is limited. Screening and/or treating HBV infection should not delay the initiation of chemotherapy (Artz et al., 2010).

Statement from ASH Lymphoma Task Force on gap:
New guidelines on hepatitis B testing were released from the CDC in September 2008. Concerns were raised in the oncology community regarding the degree of change and associated costs and potential for risk without proven benefits. In response, ASCO released a provisional clinical opinion in July 2010 specifying the need for hepatitis B testing in patients being considered for rituximab and hematopoetic cell transplant. As this clarification in relatively new, we believe a gap in care continues.

This measure has been in use for the American Board of Internal Medicine (ABIM) Maintenance of Certification Performance Improvement Module since July 2013. Performance over the first 10 months (through May 2014) among this highly select group of hematologists is 69%. We believe performance among all hematologists would be somewhat lower. This gap remains significant and identifies a deficiency that poses serious risk of catastrophic liver failure for patients if not appropriately prophylaxed.

Evidence for Additional Information Supporting Need for the Measure

American Society of Hematology (ASH). Non-Hodgkin lymphoma measure set: measure specifications. Washington (DC): American Society of Hematology (ASH); 2017 Feb. 36 p.

Artz AS, Somerfield MR, Feld JJ, Giusti AF, Kramer BS, Sabichi AL, Zon RT, Wong SL. American Society of Clinical Oncology provisional clinical opinion: chronic hepatitis B virus infection screening in patients receiving cytotoxic chemotherapy for treatment of malignant diseases. J Clin Oncol. 2010 Jul 1;28(19):3199-202. PubMed

Extent of Measure Testing

The non-Hodgkin lymphoma (NHL) measure set was developed by the American Society of Hematology (ASH) using a rigorous methodology (adapted from the American Medical Association [AMA]-convened Physician Consortium for Performance Improvement [PCPI]) and has been field tested. The NHL measure set was accepted by American Board of Internal Medicine (ABIM) for use with practice improvement modules meeting Part 4 of Maintenance of Certification Requirements in 2013.

Evidence for Extent of Measure Testing

Frechette S. (Principal, Northfield Associates, LLC, Warren, VT). Personal communication. 2014 Dec 10. 1 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Unspecified

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

Unspecified

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Therapeutic Intervention

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

The number of lymphoma patients in your selection treated with anti-CD20 monoclonal antibody-containing regimens

Note: Refer to the original measure documentation for a list of International Classification of Diseases, Tenth Revision (ICD-10) codes used in lymphoma patient selection.

Exclusions
Patient already documented to have had infection specifically with hepatitis B

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions
The number of lymphoma patients in your selection:

> Treated with anti-CD20 monoclonal antibody-containing regimens
> AND
>
> Tested for hepatitis B (hepatitis B surface antigen [HBsAg] and hepatitis B core antibody [HBcAb]) in advance of starting treatment

Note: This requires documentation in the patient's medical record that the patient being considered for anti-CD20 monoclonal antibody-containing regimens be tested for HBsAg AND HBcAb.

Exclusions
Patient already documented to have had infection specifically with hepatitis B

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Measure 3: patient treated with anti-CD20 monoclonal antibody-containing regimens tested for hepatitis B prior to medication administration.

Measure Collection Name

Non-Hodgkin Lymphoma Measure Set

Submitter

American Society of Hematology - Medical Specialty Society

Developer

American Society of Hematology - Medical Specialty Society

Funding Source(s)

The American Society of Hematology

Composition of the Group that Developed the Measure

The American Society of Hematology (ASH) Lymphoma Task Force:

Joseph Connors, MD (*Co-Chair*)
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Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2017 Feb

Measure Maintenance

American Society of Hematology (ASH) reviews/updates measures annually

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

This measure updates a previous version: American Society of Hematology (ASH). Non-Hodgkin lymphoma measure set: measure specifications. Washington (DC): American Society of Hematology (ASH); 2015 Dec. 36 p.

Measure Availability

Source not available electronically.

For more information, contact the American Society of Hematology (ASH) at 2021 L Street NW, Suite 900, Washington, DC 20036; Phone: 202-776-0544; Fax: 202-776-0545; Web site: www.hematology.org.

NQMC Status

This NQMC summary was completed by ECRI Institute on June 19, 2015. The information was verified by the measure developer on August 27, 2015.

This NQMC summary was updated by ECRI Institute on April 18, 2016. The information was verified by the measure developer on May 24, 2016.

This NQMC summary was updated again by ECRI Institute on March 21, 2017. The information was verified by the measure developer on May 3, 2017.

Copyright Statement

Production

Source(s)

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